REGISTRATION OF ‘NORKAN’ WHEAT

‘NORKAN’ (Reg. no. 725, PI 506345, KS82H4) is a hard red winter wheat (Triticum aestivum L.) developed cooperatively by the Kansas Agricultural Experiment Station and the USDA-ARS. It was jointly released to seed producers in 1986 by the developing institutions and the Nebraska Agricultural Experiment Station. Norkan was selected from the cross ‘Plainsman V’/3/2*(KS76H3705)’Larned’/’Eagle’//’Sage’. The cross was made by the late R.W. Livers at the Fort Hays Branch Agricultural Experiment Station in the winter of 1976-1977. Norkan is an increase of an F4 plant row grown at Hays, KS in 1981.

Norkan is medium to medium-late maturing and heads about 1 d later than ‘Newton’. Norkan has semidwarf stature and is slightly shorter than Newton, with a coleoptile length equal to that of Newton. Winter survival of Norkan has equaled ‘Scout 66’ in the 1983 to 1985 Uniform Winter-hardiness Nurseries. Leaves of Norkan are distinctly pubescent on the adaxial surface. Leaf hairs are rather sparse and are up to 0.5 mm long. Norkan’s spikes are oblong to fusiform and middense. Glumes are white, midlong, and narrow. Shoulders are narrow and wanting in basal glumes, approach square at midspike, and range to apiculate at the top of the spike. Beaks are narrow, acuminate, and 1 to 4 mm long. The kernel is red, hard, midlong, and elliptical to ovate; the germ is small; the crease is midwide and middeep; the cheeks are angular; and the brush is midsized, midlong, and has no collar.

Norkan was evaluated in Kansas advanced performance tests from 1983 to 1986, in the Kansas Wheat Variety Performance Test in 1986, and in the 1985 and 1986 Southern Regional Performance Nurseries, and appears to be best adapted to production in northern Kansas. Norkan’s yield and grain volume weight have been superior to that of ‘Newton’ and ‘Arkan’, the most commonly grown cultivars in northern Kansas.

Hard wheat milling and bread making qualities of Norkan are excellent and very similar to those of Eagle, with a slightly lower loaf volume than Eagle and a better crumb color. The grain and flour protein contents are equal to those of Eagle and 1 percentage point higher than those of Newton.

Norkan has resistance to wheat soilborne mosaic virus, leaf rust (caused by Puccinia recondita Rob. ex Desm. f. sp. tritici Eriks), stem rust (caused by P. graminis Pers. f. sp. tritici Eriks and E. Henn.), and biotypes GP, A, and C of Hessian fly (Mayetiola destructor Say), which is conditioned by the H3 gene derived from Larned. Norkan is susceptible to wheat streak mosaic virus.

Application for cultivar protection under the Plant Variety Protection Act, Public Law 91-577 has been filed. Norkan breeder’s seed will be maintained at the Fort Hays Branch Experiment Station, Hays, KS 67601.


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References and Notes


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